

Market Research

Berkeley FIRST

Devi Prasad

Dt: 03/25/2008



Customer Survey Goals

1. Determine market barriers and purchase factors
2. Relation between home size and energy use
3. Total Market potential in the next 3 years
4. Willingness to pay



Survey methodology

- Total Respondents – 310
- Period – 4 weeks
- Respondent Source – City of Berkeley property owners; Database: City councilors, Measure g and Berkeley parents network
- Filtered incomplete responses, pre-existing solar and thermal users
 - Single family – 211
 - Multi-family – 20



Purchase factors (211 responses)

In the recent past, when you have been offered services by solar electric or solar hot water vendors and/or home efficiency improvement contractors.....

• Understood all aspects of these offerings but thought it did not fit my needs	8.5%	17
• Understood benefits but did not have the available funds to invest right away	49.5%	99
• Confused about the economics and different numbers in the brochures	9.5%	19
• Talked to some vendors but did not have time to investigate the offering	9.5%	19
• Have purchased a panel already	0.5%	1
• Understood all aspects and decided to postpone for other reasons (please specify)	22.5%	45

Comments: Poor payback

Trees shades my roof

Financial benefits are not clear

Never been solicited by vendors

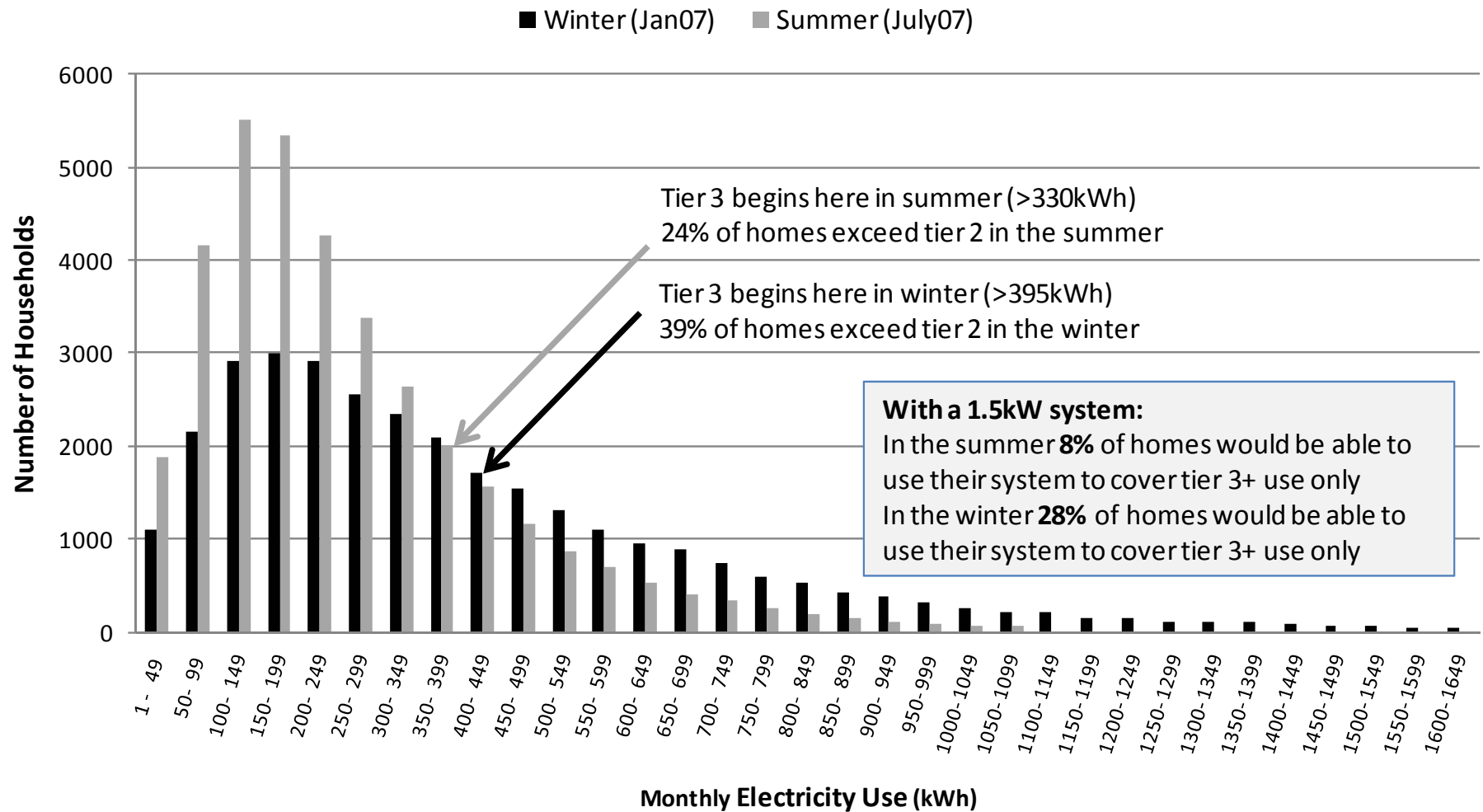


Single family homes (211 responses)

Energy-efficient attic and wall insulation	42.2%	89 respondents
Double paned windows	43.6%	92 respondents
Gas heat	94.8%	200 respondents
Own energy efficient appliances	67.8%	143 respondents
Monthly bill has > 50% natural gas component (excluding electric charges)	38.9%	82 respondents



Berkeley Residential Electricity Use (2007)



Projections for year 1 :

- We project at-least 1000 homeowners are likely to signup for the FIRST financing in year 1
- We also recommend that the city of Berkeley limit its marketing of the program to 'word of mouth' until the year 2 of the program.
- A soft launch will allow the city office to build up its internal fulfillment infrastructure and for the initial glitches to be fixed.

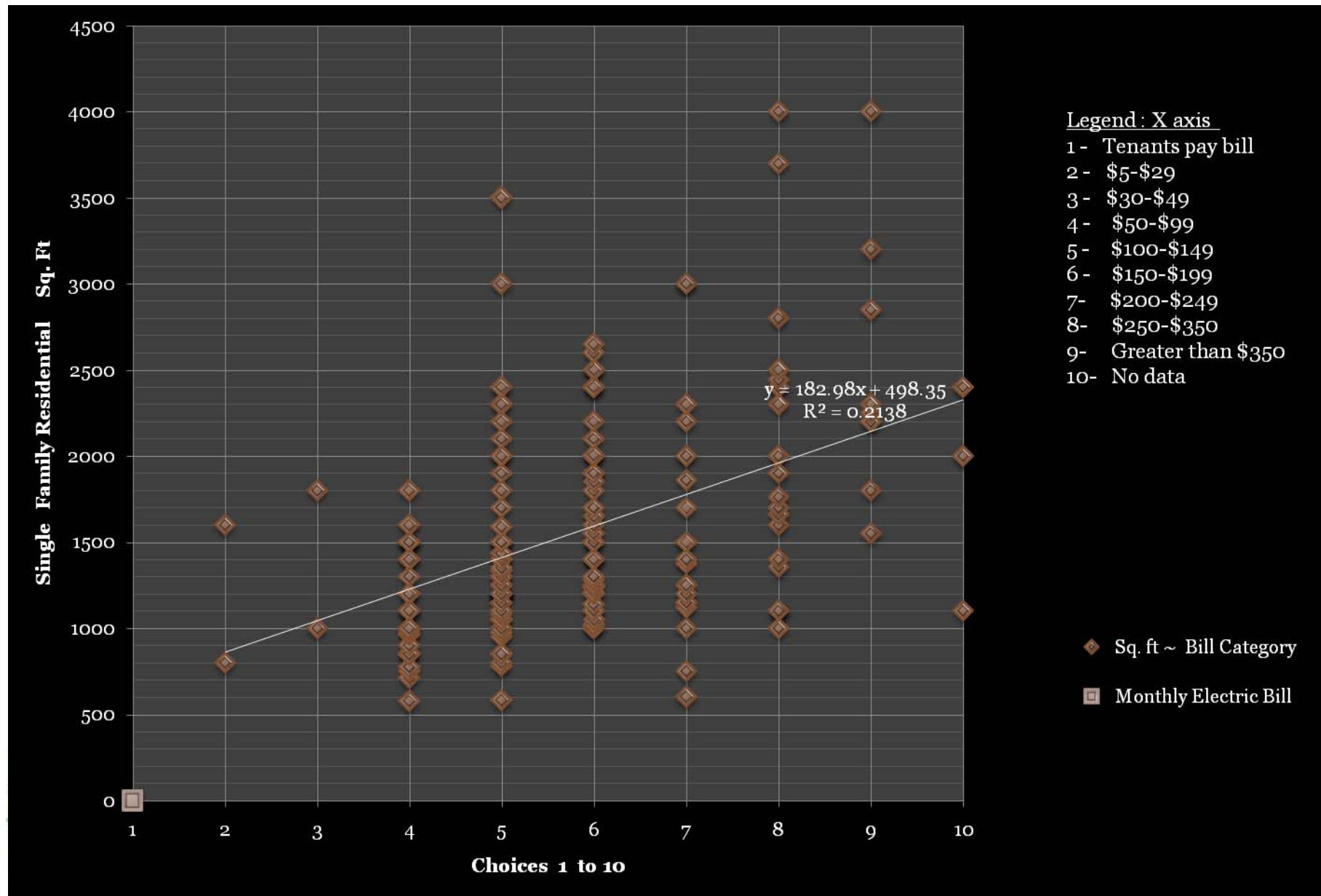


How we arrived at the Year one - projections:

- 1) 17148 total single family accounts
- 2) 24.5% of the single-family respondents have greater than \$200 in monthly electric bills
- 3) This co-relates with 28% of the respondents who claimed they will definitely signup for this program if PV cost-savings are shown with FIRST financing
- 4) Projecting this number to homes this would be 4287 homes likely to install PV
- 5) Timeframe: 75% of the respondents claimed they will signup within 6months for FIRST financing
- 6) That would be potentially 3215 homeowners who will be inclined to signup for FIRST (Assuming all of them have viable solar roofs)
- 7) Even if 1/3rd of this homes have viable roofs, we are looking at a 1000 home-owners who are likely to queue up to use FIRST financing.
- 8) Additional data needs to be collected on shaded roofs in Berkeley



Co-relation between home size and energy use - 211 Single –family respondents



Purchase Factors – City as a Market Catalyst

The City of Berkeley may also establish standards for vendors, equipment and energy efficiency work, and offer a list of approved vendors for these services. How would this influence your decision to participate?

Very helpful to my purchase decision due to convenience	40.5%	102
Very helpful due to my trust in the city's screening process	16.7%	42
Somewhat helpful to my purchase decision	32.9%	83
No influence at all	4.8%	12
Other:	5.2%	13



Answered question

252

Purchase Factors – City as a Market Catalyst

What aspects of the energy efficiency and renewable energy system purchase process would you find most helpful if there was City of Berkeley involvement? Mark one or more...

Screening experienced vendors and verifying their claims
62.7% 158 respondents

Provide fair and neutral information on the technical and financial aspects 82.5% 208 respondents

Other aspects (please specify)
19.0% 48 respondents

Answered question

252



Purchase Factors – Decision Time Frame

If the City of Berkeley were able to offer a financing program and your property qualifies for participation, what would be your decision timeframe?

Within 30 days	16.3%	41
1-2 months	21.0%	53
3- 6 months	39.7%	100
More than 6 months	23.0%	58
Answered question		252



Rank the program benefits that are attractive to you.

- | | |
|---|--------------------|
| 1. Making a difference in the fight to stop global warming | 82.5% (208) |
| 2. Ability to produce my own electricity or hot water year-round | 76.2% (192) |
| 3. Immediate savings in natural gas and electricity costs from energy efficiency improvements | 63.9% (161) |
| 4. Convenience of purchase | 56.7% (143) |
| 5. No upfront investment | 54.8% (138) |
| 6. Improved home comfort, no cold and drafty rooms, less street noise | 51.2% (129) |
| 7. Increase in my property value | 42.5% (107) |



Additional Insights

- Average 'willingness to pay' mitigation cost - \$2380.00
- 54% of respondents claimed that they will purchase a viable electric car within 2 years of its launch
- Further research needs to be done to estimate shaded roofs in Berkeley to arrive at market potential
- Full survey data is available for download

